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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,042	04/28/2000	KLAUS PAWELZIK	1035-00	8093
35811	7590	06/10/2005	EXAMINER	
IP GROUP OF DLA PIPER RUDNICK GRAY CARY US LLP 1650 MARKET ST SUITE 4900 PHILADELPHIA, PA 19103			THOMSON, WILLIAM D	
			ART UNIT	PAPER NUMBER
			2123	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/508,042	PAWEZIK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William D. Thomson	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 4/28/2000 and 10/29/04.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 10/28/04.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-15 have been presented for examination.
2. Claims 1-15 have been rejected.

**Priority**

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). For examination, Applicant's earliest priority date is September, 15, 1997.

**Information Disclosure Statement**

4. The information disclosure statement filed October 28, 2004, fails to comply with 37 C.F.R. 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Copies have not been provided, therefore, the IDS has been placed in the application file, but the information referred to therein has not been considered.

5. The listing or referencing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and M.P.E.P. § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. In the instant case the following has not been considered: "Introduction to the theory of neural

computation", Hertz et al., Addison-Wesley Publishing company, 1991, especially chapter 9 entitled "Unsupervised competitive learning".

***Specification***

6. The disclosure is objected to because of the following informalities: The use of "eg" and "(see below)", see pages 7 and 9, respectively, should be corrected. These are only one example of each, the specification is replete with these throughout. Appropriate correction is required.

7. The attempt to incorporate subject matter into this application by reference to the publication: K. Pawelzik et al., "Neural computation", vol. 9, 1996, p. 340 ff., is ineffective because this information is essential to practice of the invention, and is found in a publication. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 C.F.R. 1.57(f).

***Claim Objections***

8. Claim 5 is objected to under 37 C.F.R. 1.75(c) as being an improper form because it states "according to one of the claims 1 through 4, where there appear to be editing marks on the copy submitted to the Office, and has not been addressed in the Preliminary Amendment dated October 28, 2004. See M.P.E.P. § 608.01(n). Examiner has interpreted these editing marks to be representative of claim 5 being dependent on claim 1.

***Claim Rejections - 35 U.S.C. § 112***

9. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. *Switched and drift segmentation* are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Specifically this material has been improperly incorporated by reference via a publication. If this material is provided in an amendment with appropriate affirmative statements as outlined above regarding the objection to the improperly incorporated subject matter, this rejection may be overcome.

***Claim Rejections - 35 U.S.C. § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the phrase "the values a(s) are restricted to a certain resolution figure R and/or are equidistant" renders the claim indefinite. The term is a relative term which renders the claim indefinite. The term "restricted to a certain resolution figure R and/or are equidistant" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 U.S.C. § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1, 15, 2, 5-10 are rejected under 35 U.S.C. 101 because they are mathematical algorithms, not embodied in the technological arts and do not provide a useful, concrete and tangible result therein. It is unclear whether these claims are operating in a computer or another device. Further, it is unclear what, if any, result can be calculated and then how it could be used in a real world environment. The language of the claim raises a question as to whether the claim is directed merely to an abstract

idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

***Allowable Subject Matter***

12. Claims 3, 4 and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, with appropriate amendments that overcome any rejection of the intervening claims.

***Conclusion***

13. The prior art made of record, see accompanying P.T.O 892, and not relied upon is considered pertinent to applicant's disclosure.

**CONTACT INFORMATION**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William D. Thomson whose telephone number is 571-272-3718. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 571-272-3716.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William Thomson  
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May 27, 2005